Annex 1N – Woodland Report

Section 4 - Glenquoich

Contents

Figures

1. Woodland Characteristics

Glenquoich Woodland is owned by Wester Glenquoich Estate. The woodland is accessed from the unclassified Loch Hourn Road, approximately 23 miles west of Invergarry (see **Figure 1 - Glenquoich Location Plan**). The native woodland has upland birch (W4) as its principal species. The proposed OHL alignment affects the woodland between towers BF183-BF188, BF194-BF195, BF208-BF211, BF221-BF224, BF225-BF227 and BF231-BF233.

The woodland has no active management plan.

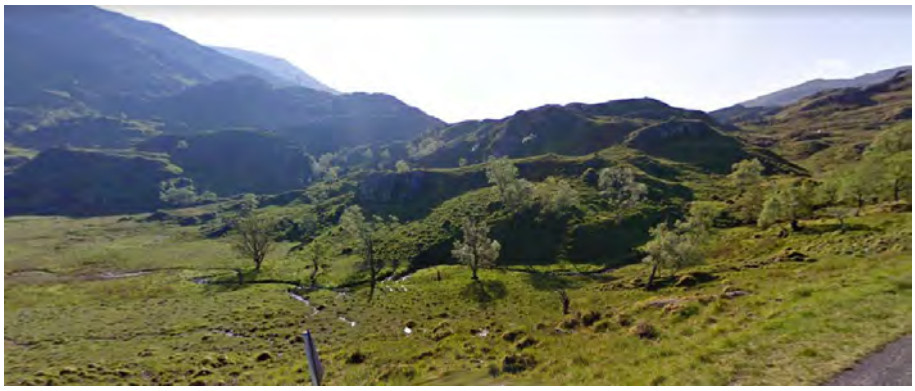
Towers BF183-BF188

Mature upland birch woodland (W4). The woodland is recorded on the Ancient Woodland Inventory (AWI) as Ancient of semi-natural origin. A historical planting scheme was planted in 2005, and is a mix of Scots pine and native broadleaves. The extent of open ground with sporadic small trees negates the possibility of timber harvesting. Low ground pressure mulching is recommended.

Mature upland birch woodland W4

Towers BF194-BF195

Mature upland birch woodland (W4). The woodland is recorded on the AWI as Ancient of semi-natural origin. Scattered open habitat. The extent of open ground with sporadic small trees negates the possibility of timber harvesting. Low ground pressure mulching is recommended.



Scattered open habitat W4 woodland

Towers BF208-BF211

Historical planting scheme planted in 1994, and is a mix of Scots pine and native broadleaves. The extent of open ground with sporadic small trees negates the possibility of timber harvesting. Low ground pressure mulching is recommended.

Historic planting scheme.

Towers BF221-BF224

Lodgepole pine and Sitka spruce plantation. There is sporadic windblow within the north-west boundary. Additional felling would be required out with the OC, leading to the felling of the entire woodland. Scattered open woodland of Larch and Scots pine to the east. Due to the open habitat, no additional felling out with the OC would be required.

LP and SS Plantation

Larch and Scots pine woodland

Towers BF225-BF227

LP, SS and Larch plantation. There is wind throw damage through the lower section of the woodland running west to east. An additional area to the south of the OC would need to be removed to create a wind firm edge.

Mature LP,SS,L plantation, looking east.

Woodland edge, with significant wind throw damage.

Towers BF231-BF233

Mature upland birch and Scots pine woodland (W4/18). The woodland is recorded on the Ancient Woodland Inventory (AWI) as Ancient of semi-natural origin. Scattered open habitat of mature granny Scots pine opening up to the east.

Scattered open W18 woodland habitat

2. **Development Requirements**

A resilient OC of 40m in width either side of the OHL would be required throughout the commercial woodland. This would be reduced to 15 m in width either side of the OHL within the AWI area and increased to 30 m in width either side of the OHL within the semi-natural broadleaved area This allows for the widest part of the tower and an allowance for maintaining the necessary safety clearance distances.

The existing Kinlochourn Estate road would be utilised to access towers BF183-BF188. The unclassified Loch Hourn Road runs along the southern boundary of the woodlands allowing access to Towers BF194-BF195, BF208-BF211, BF221-BF224, BF225-BF227 and BF231-BF233.

Tree felling and extraction within the OC for Towers BF194-BF195, BF208-BF211, BF221-BF224, BF225-BF227 and BF231-BF233 would be able to utilise existing tracks, prior to any construction activity. The access road to towers BF183-BF188 is unsuitable for extraction so the trees would be felled to waste.

Stump removal and residue mulching would be required for the installation of access tracks within the OC and at each steel lattice tower, working areas would be formed and which would include a temporary crane pad.

3. **Wind Blow Risk**

There is a low-medium wind blow risk across much of the woodland (DAMS Score of 15). There are several tower spans within the commercial woodlands where the proposed OC opens a green edge to the prevailing wind necessitating additional felling out-with the OC to reach a stable edge (see **Figure 2a-c**).
In areas where the trees are smaller due to age or exposure then the wind blow risk is reduced along with the requirement for additional felling to wind firm boundaries.

4. **Woodland Management Impact**

The OHL within the commercial woodland would create additional challenges for the future management of the forest as it dissects existing management units and introduces an electrical hazard. The constraint associated with the electrical hazard would be reduced by regular maintenance of the OC which would avoid the incidences of “Red Zone” trees (reference FISA 804 “Electricity at Work: Forestry”). As part of construction works, dedicated crossing points will be discussed once the OHL has been constructed, thus ensuring safe future working within the woodland.

The total loss of Native Broadleaved woodland resulting from the proposed OHL in this woodland site is 4.7 hectares.

5. **Mitigation Opportunities**

The reduction in the OC within the AWI and broadleaved areas has reduced the impact on the native woodland within this area. The native upland birch and oak woodland is likely to regenerate into the OC in the vicinity of the OC post construction and present an opportunity to replace some of the woodland loss from tower/ line construction.

a. **Restructuring**

There is currently no active management plan for the woodland area. The proposed felling would have no impact on future works.

b. **Restocking**

Restocking would be carried out by the landowner in all areas out-with the OC with suitable species to continue the commercial viability of the forest. It is anticipated that native broadleaved regeneration is likely to occur within the OC from towers BF183-BF188, BF194-BF195, BF208-BF211 and BF231-BF233 due to the presence of mature birch and oak woodlands.

Any opportunity to restock within the OC would be discussed with the landowner following felling to link in with adjacent planned felling coupes where appropriate.

Refer to **Figure 3** for a plan showing the on-site restocking.

6. **Net Effect/Summary**

Tower Span	**Operational Requirements**
BF183-BF188	Gross area of OC felling required, undertaken by the Applicant. - Native woodland –. 0.83 ha
BF194-BF195	Gross area of OC felling required, undertaken by the Applicant. - Native woodland 0.09 ha
BF208-BF211	Gross area of OC felling required, undertaken by the Applicant. - Native woodland – Mulch. 3.2 ha
BF221-BF224	Gross area of OC felling required, undertaken by the Applicant. - Commercial woodland LP/SS/L– fell to windfirm edge. 1.7 ha
BF225-BF227	Gross area of OC felling required, undertaken by the Applicant. - Commercial woodland LP/SS/L– fell to windfirm edge. 0.37 ha
BF231-BF233	Gross area of OC felling required, undertaken by the Applicant. - Native Woodland 0.42ha
New Tracks	Accommodating 20 m buffer – 0.2 ha native woodland to be felled.
Additional area of recommended felling outside OC for wind throw or forest design purposes (Landowner to fell under forest plan revision or felling licence)	Clear fell to windfirm edge – LP/SS/L – 1.63 ha

Compensatory Planting Options	
Potential onsite replacement planting/ regeneration within OC	0
Nett effect (Loss of Woodland)	6.8 ha
Operational Works	
	Total Area (ha)
Clear fell harvesting	6.6
New Tracks	0.2
Clear fell out with OC	1.63
TOTAL	**8.43**

7. Compensatory Planting

The total amount of net felling requiring compensation under the Control of Woodland Removal Policy is 6.8 ha.

In order to provide a greater balance limiting long term impacts on forestry interests it is proposed that the majority of this woodland loss is compensated via offsite compensatory planting. It is proposed that full details of the areas subject to this offsite compensatory planting is notified to Scottish Forestry prior to energising the OHL.

The dismantling of the existing 132 kV OHL could allow potential opportunities for compensatory planting where practical and in agreement with the landowner.

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Wester Glenquoich

Glenquoich Boundary

Proposed Route Alignment

Loch Quoich

Kinlochhourn Forest

Cluanie Forest

Barrisdale Forest

East Glenquoich Forest

Glen Quoich

Kinloch Hourn

Cluanie Inn

Cluanie Lodge

22

SHIEL

The Saddle

Sgurr na Sgine

Creag nan Damh

Sgurr an Lochain

Buidhe Bheinn

Sgurr Thionail

Aonach air Chrith

Maol Chinn-dearg

Sgurr a' Mhaoraich

Gleouraich

Barrisdale

Gleann Chòsaidh

Abhainn Chòsaidh

Druim Chòsaidh

LOCH CUAICH

River Loyne

Gearr Garry

Beinn Bheag

Coille Mhorgil

919 939 1012 944 918 1030 1001 1000 1010 906 879 981 1019 987 947 948 1026 1034 1006 996 895 701 329

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Project: OHL Woodland Report

Title: App 1. Glenquoich Location Plan

Drawn By: Louise Alexander

Drawn Date: 02/06/2022 | Revision No: -01-

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Page Size: A3 Scale: 1:35000

Map Reference: OHL Woodland Report_App 1. Glenquoich Location Plan_A3_20220602_Rev 01

196000 197000 806000 805000 804000

BF183 BF184 BF185 BF186 BF187 BF188 BF189 BF190 BF191 BF192 BF193 BF194 BF195 BF196

Path Ford Fords

Lochoum River

58m 71m 73m

353m Tom nan Ramh

Allt Ban

Innis na Craige

Glenquoich Forest

112m CG

608m Meall an Uillt Bhain

126m

Loch Coire Shubh

Coille Lochain Choire Shubh

347m 458m 292m 540m

Path Coireshubh

Drochaid Coire Shubh

116m

Allt Coire Shubh

202m

131m 183m

Allt Coire Shubh Beag

186m 451m

140m 175m

230m Doire Dubh

214m Path

Loch an Doire Duibh

200m 317m 318m

218m 289m

294m

228m 210m 240m

227m 220m 230m

Intake Path Intake FB Track Intake Conduit Tk

Intake Drochaid Allt a' Bhodaich

280m

Allt Coire Shubh Beag

Section 4 Operational Requirements Towers BF183-BF195

- OC Felling - 0.92ha
- New Track Felling - 0.2ha
- Proposed OHL
- Proposed Tower Positions
- Existing Access Track
- New Access Track
- Spur Access
- 30m OC
- AWI

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Title: OC Felling RequirementsTowers BF183-BF195

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Page Size: A3 Scale: 1:7500

Map Reference: Section 4 Felling Requirements_Towers QB208-QB217_A3_20220527_Rev 01

200000 201000 202000 203000

804000 803000

Allt na Cam Baine
Coire nan Eiricheallach
Allt Coire nan Eiricheallach
Allt Nghoan Eobhan
Glen Quoich
Cnocan nam Muc
Druim Seileach
Sron a' Chuilinn
Loch Cuaich
Sheepfold
Ford
Path

BF208 BF209 BF210 BF211 BF212 BF213 BF214 BF215 BF216 BF217 BF218 BF219 BF220 BF221 BF222 BF223 BF224 BF225

Section 4 Operational Requirements Towers BF208-BF224

- OC Felling - 4.9ha
- Felling out with OC - 1.02ha
- Proposed OHL
- Proposed Tower Positions
- Existing Access Track
- New Access Track
- Spur Access
- 60m OC
- 80m OC

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Title: OC Felling Requirements Towers BF208-BF224

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Map Reference: Section 4 Felling Requirements_Towers QB228-QB245_A3_20220527_Rev 01

203000 204000 205000

803000 802000

Waterfall Waterfall Ford Ford Ford Path Allt a' Mheil 614m

BF224 BF225 BF226 BF227 BF228 BF229 BF230 BF231 BF232 BF233 BF234 BF235

226m 431m Meall a' Mheil Allt Llaine Allt Feanna

Path Fords Waterfall Allt a' (Waterfall) Allt Feanna 219m 211m

Mast 215m 227m 228m

aich

Section 4 Operational Requirements Towers BF225-BF233

- OC Felling - 0.79ha
- Felling out with OC - 0.61ha
- Proposed OHL
- Proposed Tower Positions
- Existing Access Track
- New Access Track
- Spur Access
- 30m OC
- 80m OC
- AWI

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Title: OC Felling Requirements Towers BF225-BF233

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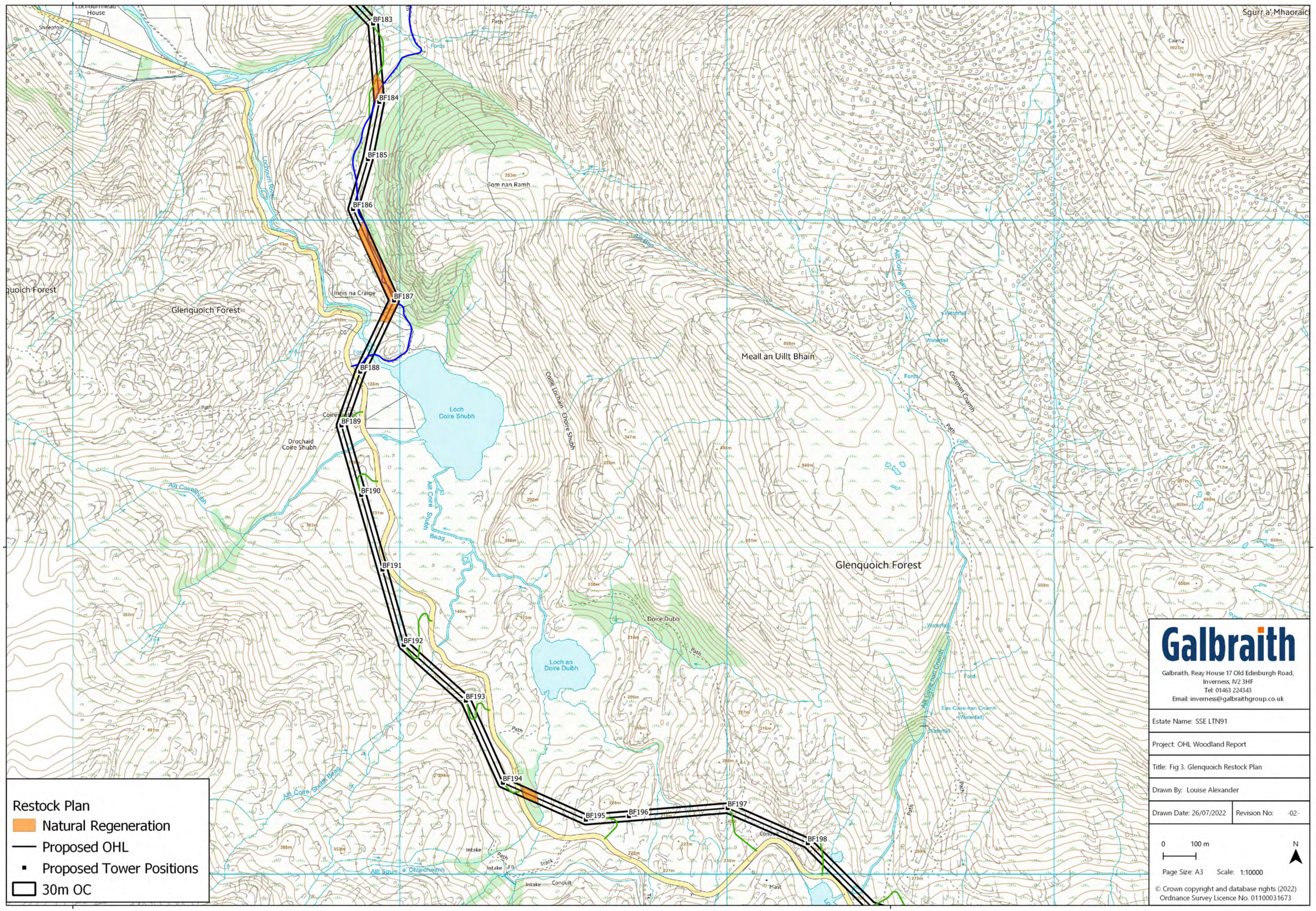

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Project: OHL Woodland Report

Title: Fig 3. Glenquoich Restock Plan

Drawn By: Louise Alexander

Drawn Date: 26/07/2022 Revision No: -02-

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Page Size: A3 Scale: 1:10000

Map Reference: OHL Woodland Report_App 3. Glenquoich Restock Plan_A3_20220602_Rev 02

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Leac nan Gaidhseich

Bac nan Canaichean

Allt na Cam Baine

Glen Quoich

Coire nan Eiricheallach

Allt Coire nan Eiricheallach

Allt Righean Eobhan

Loch a' Choire Bheithe

Choille-Mhaim

Ford

Path

Cairn

Sheepfold

BF202
BF203
BF204
BF205
BF206
BF207
BF208
BF209
BF210
BF211
BF212
BF213
BF214
BF215
BF216
BF217
BF218
BF219

Restock Plan
- Natural Regeneration
- Proposed OHL
- Proposed Tower Positions
- 60m buffer

802500

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Map Reference: OHL Woodland Report_App 3. Glenquoich Restock Plan_A3_20220602_Rev 02

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Glenquoich Forest

Loch Fearna

Meall a' Mheil

Loch Cuaich

Rubha Dubh nam Fiadh

BF224
BF225
BF226
BF227
BF228
BF229
BF230
BF231
BF232
BF233
BF234
BF235
BF236
BF237
BF238
BF239
BF240
BF241
BF242

Waterfall
Ford
Path
Alltan Uaine
Allt a' Mheil
Allt Fearna
Mast
226m
431m
614m
587m
219m
211m
215m
227m
218m
225m
228m
234m
220m
299m
269m

Restock Plan

- Natural Regeneration
- Proposed OHL
- Proposed Tower Positions
- 30m buffer

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Map Reference: OHL Woodland Report_App 3. Glenquoich Restock Plan_A3_20220602_Rev 02